ASSESSING THE LONG-TERM HEALTH BENEFITS OF MEDICAL HUMANITARIAN CIVIC ASSISTANCE MISSIONS

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Contents

| | Page |
|---|------|
| DISCLAIMER | ii |
| LIST OF TABLES | iv |
| PREFACE | v |
| ACKNOWLEDGMENTS | vii |
| ABSTRACT | viii |
| HUMANITARIAN CIVIC ACTION MISSION OBJECTIVES | 1 |
| SPECIFIC MEDICAL HCA ROLES AND MISSIONS | |
| MEDCEUR And MEDFLAG Mission Structure PACOM Medical HCA Operations (COBRA GOLD) | |
| HUMANITARIAN CIVIC ACTION MISSION IMPACT | 12 |
| EUCOM Medical HCA Mission Impact | |
| Cobra Gold Mission Impact | 20 |
| ALTERNATIVES AND CONCLUSIONS | 25 |
| Joint Doctrine | 26 |
| Strategic Plan | 28 |
| Interagency Coordination | 29 |
| Follow-Up Protocols | 31 |
| Education and Training | 32 |
| BIBLIOGRAPHY | 35 |

Tables

| | | Page |
|----------|----------------------------|------|
| Table 1. | MEDFLAG Missions | 7 |
| Table 2. | Botswana Health Statistics | 17 |
| Table 3. | Cameroon Health Statistics | 18 |
| Table 4. | Senegal Health Statistics | 18 |
| Table 5. | Zimbabwe Health Statistics | 19 |
| Table 6. | Thailand Health Statistics | 22 |

Preface

I initiated this research in response to a Joint Chiefs of Staff proposal exploring the long-term benefits medical humanitarian civic action projects (HCA) have on their target populations. The foundational premise was these missions, while important to U.S. military forces, are not producing measurable health care improvements to the host nation. Changing roles of U.S. military forces in the post Cold War era and the Department of Defense emphasis on joint operations influenced the scope of this research. Post Cold War military forces are postured much differently than a decade ago and military operations other than war (MOOTW), which include HCA missions, demand more resources and training. Tandem is the renewed focus on joint operations stressing combined military missions and elaborate coordination with civilian agencies.

Humanitarian civic action operations in Africa, Eastern Europe and Thailand comprise the foundation of my research. I only briefly address Medical Readiness Training Exercises (MEDRETE) sponsored by USSOUTHCOM because I was aware that a fellow student was focusing her research on these specific missions. I also excluded Balikatan missions because information was not readily available and the sporadic on again-off again nature of recent operations. The fundamental questions I addressed were: do current missions produce long-term benefits and if not, what steps are necessary to create lasting improvements in the health care standards of developing nations using U.S. military forces.

Abundant information on HCA does not exist. Anecdotes written by team members of select missions were plentiful but data describing the structure, scope, mission emphasis and execution is not readily available. Focus on these mission aspects became a secondary purpose of the paper. I relied heavily on information from individuals at HQ EUCOM and HQ PACOM who provided both verbal interviews and written references. The paper is constructed to link HCA missions to U.S. security interests and foreign policy objectives, fully describe the physical composition of MEDFLAG, MEDCEUR and Cobra Gold missions, assess the impact of current mission structure and finally provide alternatives to create the foundation for long-term, sustainable health care improvements in developing nations.

Acknowledgments

Several individuals were critical to my research. Major Rick Cook, USEUCOM, Medical Readiness and Plans Officer, provided valuable written references and provided several interviews on MEDCEUR missions. Captain Ken Pell, USEUCOM, Joint Blood Program Officer, provided numerous MEDFLAG after action reports and was willing to conduct several early exploratory interviews that shaped the initial focus of the paper. Major Steve Yoshimura, USPACOM, Civil Affairs and Psychological Operations Planning Officer, provided almost all the references I used for Cobra Gold mission research and conducted several eye opening interviews. I probably need to buy a new copier for his shop and his time and efforts were greatly appreciated. Mr. Bill Lyerly, U.S.A.I.D. provided several interviews and was also instrumental in brainstorming Chapter 4. Interagency coordination is now recognized as the smart way to do business and his time and references were appreciated. Finally, Major Cathy Duncan, my faculty research advisor had the unenviable position of keeping me on task. Her constructive guidance provided the structure needed to ensure my research met all ACSC time and length requirements. Thanks to all who assisted me with this research.

Abstract

Medical humanitarian civic assistance (HCA) missions are not designed to provide long-term, sustainable health care improvements to developing nations. Joint doctrine and Title 10, U.S. Code limit HCA missions to: providing assistance in conjunction with military operations, satisfying unit training requirements and creating an incidental humanitarian benefit to local populations as unit training requirements are being met. While training requirements are always satisfied, little benefit is provided to the host nation populace. Missions in Eastern Europe, Africa and Thailand were analyzed for their current mission structure and impact on target populations. Three World Health Organization measures of effectiveness were used to identify health care improvements in Thailand, Botswana, Cameroon, Senegal and Zimbabwe. Analysis revealed HCA missions to Thailand had a positive impact on the health care standards but a similar HCA mission impact was not apparent for the African countries. Five alternatives to current doctrine and practices were identified to promote sustainable health care improvements without changing the basic structure or footprint of existing HCA missions. First, joint doctrine changes are needed if sustainable benefits become an objective. Second, a country wide strategic plan that addresses infrastructure as well as medical conditions is essential. Third, since no single entity has the unlimited resources to make substantial health care improvements, interagency coordination is crucial. Fourth, follow-up protocols provide assessment mechanisms to direct and redirect resources. Fifth, education and training initiatives are needed to target the underlying causes that prohibit or stifle lasting health care improvements. Without attention to these five mission factors it is doubtful HCA missions will provide sustained health care improvements in developing nations.

Chapter 1

Humanitarian Civic Action Mission Objectives

It is this abiding faith in democracy that steels us to deal with a world that, for all our hope, remains a dangerous place--a world of ethnic antagonisms, national rivalries, religious tensions, spreading weaponry, personal ambitions and lingering authoritarianism. For America, there can be no retreat from the world's problems.

—President George Bush

For over 50 years the United States armed forces planned for a general war in Europe. Roles, missions and training focused on the European scenario and the U.S. postured forces to meet this challenge. When the cold war ended and reduced the immediate threat of general war, many U.S. military roles and missions shifted from supporting general war to military operations other than war (MOOTW). This broad mission classification encompasses a plethora of military operations including humanitarian assistance (HA) and humanitarian civic assistance (HCA). These terms are often used interchangeably but HA and HCA each has its own discrete meaning. Humanitarian assistance refers to an immediate, emergency response in support of natural or manmade disaster relief efforts. Humanitarian civic assistance missions are usually planned missions designed to promote U.S. interests and assist a host nation. The broader heading of humanitarian operations includes both terms.

Humanitarian operations are a critical aspect of the 21st century national security strategy. Fiscal year 1997-2001 Defense Planning Guidance (DPG) categorizes HA efforts as a United States national interest and authorizes the use of U.S. forces and/or Department of Defense resources for these missions.² Senator Sam Nunn, as Chairman of the Senate Armed Services Committee, included humanitarian assistance operations as a future mission for U.S. military forces and projected force structure changes to effectively meet these mission requirements.³ ⁴ Dr. Stephen Joseph, Assistant Secretary of Defense for Health Affairs, maintained this emphasis in the Medical Program Guidance for FY 1998-2003 which outlines the core areas and priorities shaping Department of Defense health care missions for the next century.⁵ Perhaps the greatest challenge in the 21st century will be balancing the military roles of killing and destruction with the expanding military roles of reconstruction and humanitarian assistance. Verbalizing this dichotomy, General Shalikashvili, Chairman, Joint Chiefs of Staff summarizes: "The mission of America's military has always been--and I think will always remain--to deter, and if deterrence fails, to fight America's battles. We must not lose sight of that." Discussing humanitarian efforts in Somalia, he continues: "Military forces can be used to do a great deal of good, because they bring with them an organization, a structure that no civilian organization can match."6

Strategically, HCA missions help create an environment in underdeveloped countries conducive to democracy and sustainable economic prosperity.^{7 8} Host nation economic prosperity also promotes basic U.S. economic interests as these countries are projected to become consumers of U.S. manufactured goods and future trading partners. The National Security Strategy of Engagement and Enlargement states: "Our efforts to

promote democracy and human rights are complemented by our assistance programs which are designed to alleviate human suffering and to pave the way for progress towards establishing democratic regimes with a commitment to respect for human rights and appropriate strategies for economic development." Sick and dying populations are not in a position to embrace democratic ideologies or sustain economic development. Only when the rudimentary health needs of target populations in these countries are satiated and sustained, is the environment created to support the long-term objectives of democratization and economic prosperity. United States military forces have traditionally contributed more to the immediate short-term HCA objectives of stabilization than to long-term health care improvements. Stabilization in underdeveloped countries is a critical concern. If the United States can prevent humanitarian crises from reaching catastrophic proportions, the likelihood U.S. combat forces may be required at a later date is reduced.¹⁰

Humanitarian operations promote regional stability and significantly enhance the U.S. military presence in a Commander in Chief's (CINC) area of operations. At the operational level, HCA missions provide the warfighting CINC with three immediate benefits. First, HCA missions enhance the military posture in a CINC's theater of operations by assisting relief efforts to target populations, demonstrating resolve, improving collective military capabilities, promoting democratic ideals and enhancing regional stability. Second, HCA missions provide realistic training for deployed forces. Experience in mobilizing, deploying, employing, sustaining and redeploying medical personnel and assets, patient treatment in austere conditions, and work with foreign military personnel, and civilian agencies are valuable educational products of HCA missions. Third, HCA missions provide vital education and patient care services to target

populations. Sustainable development hinges on the ability of the host nation to modify adverse health practices (education), implement healthy sanitation and waste disposal measures (education) and embrace effective preventive medicine programs (patient care and follow-up). Without concurrent implementation of these and other measures, long-term benefits of HCA missions are doubtful.

The U.S. Secretary of State approves all HCA missions but the geographical CINC must decide which countries are targeted for these operations. Military Departments are authorized to perform HCA activities if the military Secretary "determines the activities will promote the security interests of both the United States and the country in which the activities are to be carried out; and the specific operational readiness skills of the members of the armed forces who participate in the activities." When there is conflict between the SECSTATE and the NCA, it typically centers around the degree of involvement and not U.S. military force presence in a host nation. Operation Support Hope, humanitarian assistance mission to Rwanda, is a perfect example.¹⁴ The joint task force commander made the appropriate transition from military to civilian operational control when the situation in Rwanda was stabilized enough for civilian agencies to manage. Allocated forces redeployed when the NCA and CINC defined end states were accomplished. Civilian agencies, such as U.S.A.I.D. and the State Department, had much longer visions of support for Rwanda that included nation-building activities and did not include end state definitions. Military forces in Support Hope effectively resisted mission creep into nation building activities and when military objectives of stabilization and self-sustainment were met, U.S. forces redeployed. The present challenge is to create medical HCA operations that support national security interests and foreign policy objectives, meet specific U.S. forces training requirements and improve the health care capabilities of a host nation in the context of existing fiscal and manpower constraints. Keys to meeting this challenge center on education, training, doctrine, and interagency coordination.

Notes

¹Air Force Doctrine Document (AFDD) 2-3. *Military Operations Other Than War*, 5 October 1996, 13.

²United States Code. *Title 10, Department of Defense Office of Humanitarian and Refugee Affairs*. Overseas Humanitarian, Disaster, and Civic Aid (OHDACA) in the Context of the National Military Strategy and Defense Planning Guidance.

³Sam Nunn, "Roles, Missions Under Scrutiny," Officer 69, February 1993: 20-24.

⁴Samuel P. Huntington, "New Contingencies, Old Roles," Joint *Force Quarterly* 2, Autumn 1993: 38-43.

⁵Stephen C. Joseph, Assistant Secretary of Defense for Health Affairs, "Medical Program Guidance," 14 February 1996, n.p.; on-line, Internet, 17 March 1997, available from http://www.ha.osd.mil/./hbp/14febmpg.html.

⁶Tad Szule, "What We Need To Do—An Interview with General John M. Shalikashvili," *Parade Magazine*, 1 May 1994, 4-6.

⁷United States Agency for International Development Bureau for Legislative Affairs, "Why Foreign Aid?" April 1992.

⁸D. Woodwell, "US Military Civic Action Programs and Democratization in Central America," *Democracy Backgrounder*, (Sep 1995), n.p.; on-line, Internet, 17 Mar 97, avail from http://library.ccsu.ctstateu.edu/history/world_history/archives/camer/camer004.htm.

⁹United States Government Printing Office. *A National Security Strategy of Engagement and Enlargement*. February 1996. Page 33.

¹⁰Woodwell, Democracy Backgrounder, n.p.

¹¹United States Code. Title 10. n.p. OHDACA Section.

¹²Ibid. Sections 401-402.

¹³DOD Directive 2205.2. *Humanitarian and Civic Assistance (HCA) Provided in Conjunction with Military Operations.* 6 October 1994.

¹⁴D. Schroeder, "After Action Review: Operation Support Hope 1994," *Joint Operations and Campaign Concepts* Coursebook, Air Command and Staff College AY 97.

Chapter 2

Specific Medical HCA Roles and Missions

To the voices in our land who say "Let us retreat behind high walls; let us put America first, let us tend to those things that matter to Americans," there can be but one response that does credit to the essence of the American genius. Americans must respond that our values do not need the protection of high walls. The strength of our nation lies in the universal character of our beliefs and the certainty that a world community of free and prosperous nations is our best assurance of freedom and prosperity for America.

—US Agency for International Development

United States military forces are routinely involved in planned HCA missions. These joint military exercises include, MEDCEURs in Eastern Europe, MEDFLAGs in Africa, Cobra Gold in Thailand, Balikatan in the Philippines, and MEDRETEs in Central and South America. This paper does not specifically address medical HCA missions in Central and South America as the author is aware of a concurrent, complementary paper addressing MEDRETE operations.

MEDCEUR and MEDFLAG Mission Structure

Medical HCA missions in European Command are divided into three phases. The first two phases (education and exercises) of the MEDCEUR and MEDFLAG mission structures are similar and are discussed together. The third phase of these operations involves medical care to target populations and is quite different because the general

populations of Eastern Europe do not face many of the same immediate, life-threatening health problems that plague many African nations. Medical HCA missions to Eastern Europe are relatively new as only three have been performed to date. Missions were conducted in Albania (1995), Bulgaria and Romania (1996) with missions to Macedonia and Moldova planned for 1997. Medical HCA missions to Africa are well established and include operations outlined in Table 1. Both the MEDCEUR and MEDFLAG missions center on the three phased operation of education, mass casualty exercises and patient treatment.

Table 1. MEDFLAG Missions

| Country | FY | Country | FY |
|-------------------|------|---------------|---------------|
| | | | |
| Gabon | 1988 | Ghana | 1994 |
| Liberia | 1989 | Cote d'Ivoire | 1995 |
| Mauritania | 1990 | Mali | 1996 |
| Tunisia | 1990 | | |
| Equatorial Guinea | 1990 | Cameroon | 1988 and 1991 |
| Guinea Bissau | 1991 | Botswana | 1989 and 1994 |
| Zambia | 1992 | Senegal | 1990 and 1993 |
| Sierra Leone | 1992 | Zimbabwe | 1991 and 1995 |
| Niger | 1993 | | |

In the first phase, U.S. military forces focus training on disaster management and mass casualty scenarios. During the site survey which precedes each mission, host nation authorities determine the location and type of required training based on indigenous concerns and scenarios likely to threaten their country. Didactic sessions emphasize command, control and communications (C³), transportation, preventive medicine, and infection control. Triage, search and rescue, airway management, cardiovascular injuries, burns and other life saving measures are also taught. Complementing these lectures, U.S.

forces conduct workshops for participants to practice basic medical techniques. One of the primary mission objectives in this phase is to provide the host nation with the structure, momentum and skills necessary to plan, conduct, and critique future exercises.³

The second phase of most missions involves a mass casualty exercise. This is coordinated during the original site survey and is purposefully designed to strain host nation medical capabilities. These exercises involve a myriad of local agencies including fire and police departments, host nation military, and medical services. Exercises are planned, executed and critiqued by local authorities while U.S. military forces function in an advisory role. The objective of this phase is to use the exercise as a learning tool and provide the structural foundation for national authorities to conduct similar exercises after joint U.S. military forces redeploy.⁴ The third phase of these operations is collectively referred to as Medical Civic Action Projects (MEDCAPS) and varies significantly between MEDCEUR and MEDFLAG missions.

The immediate health concerns of many nations in sub-Saharan Africa are not mirrored in the general population of Eastern Europe. Typically, Eastern European infrastructure and medical capabilities far exceed those found in most African nations. Exceptions to this generality are always possible as seen in Albania when U.S. MEDCAP teams were airlifted into remote, mountainous areas of the country to provide medical civic assistance to rural populations.⁵ Major Rick Cook, HQ EUCOM Medical Plans and Operations Officer, projects this is an aberration of normal operations in Eastern Europe and future missions will parallel experiences in Bulgaria and Romania.⁶ Bulgaria and Romania operations were education and training intensive with less emphasis on MEDCAP mission aspects.⁷ ⁸ The local populations in Bulgaria and Romania did not

demand the basic health care requirements routinely experienced by MEDFLAG missions.

Conversely, MEDCAPs are an essential part of the standard MEDFLAG operation.

Several MEDCAP teams can be deployed during each MEDFLAG mission as 30-50 medical personnel constitute a typical mission. These personnel often include pediatricians, surgeons, orthopedists, other specialists and their associated support staff. Teams travel to isolated daily clinics where they provide basic health care to rural populations. Care typically involves: general medical care, immunizations, dental, pediatrics, surgical consultation, dermatology, and optometry. Complicated therapy and specialized care requiring extensive follow-up such as elective or cosmetic surgery is avoided. Medical civic action projects are designed to create the opportunity for U.S. medical personnel to work in conjunction with host nation medical personnel to foster medical information exchange. This objective is at times not met as country medical personnel are unavailable due to community medical commitments. In these situations, U.S. forces conduct MEDCAP visits under appropriate security arrangements.

PACOM Medical HCA Operations (COBRA GOLD)

Pacific Command sponsored medical HCA missions have traditionally been very focused. This may change in the near future as HCA missions expand to Bangladesh, Cambodia and other Southeast Asian countries.¹² For more than 13 years, Cobra Gold exercises focused exclusively on Thailand and Balikatan missions focused exclusively on the Philippines. Cobra Gold operations are outlined below.

Cobra Gold HCA missions typically consist of between 15-20 MEDCAP operations. Extensive site surveys precede each mission and MEDCAP missions are routinely coordinated with Engineering Civil Action Projects (ENCAP) to the same area. While patients are being treated, wells are dug and schools are constructed. Another benefit of performing MEDCAP and ENCAP missions simultaneously is medical experts are available to consult on environmental health issues like water safety and sanitation. Structurally, each Cobra Gold mission is the same. United States forces work in conjunction with Thai forces to create a joint medical civic assistance program team. Usually two joint teams are created for concurrent operations in the northern and southern parts of Thailand. Each joint team performs the following services:¹³

- 1. Clinic activities with medical, dental, optical, laboratory and veterinary capability
- 2. Water supply inspections, bacteriological screening and village water study
- 3. Personal wellness teaching including: Muscle/skeletal injury prevention, dental
- 4. hygiene, breast self examination and prenatal/neonatal care
- 5. Water catchment maintenance and source protection
- 6. Eye disease screening complete with eyeglass fitting
- 7. Pesticide poisoning prevention lectures (selected villages)
- 8. Consult, advise and assistance to the ENCAP team on environmental health issues
- 9. Medical coverage for real world emergencies
- 10. Public health surveys (data collection)

Villages are selected based on anticipated patient load, population, environmental factors and need. Inspection teams triage nominated sites and each team recommends specific sites for inclusion in the upcoming Cobra Gold exercise. Site survey after action summaries are standardized and concise.¹⁴

Each of the mentioned HCA missions produce specific benefits. United States military forces receive unparalleled training, host nation military and civic forces receive training and target populations receive medical care. Education and training provided to the host nation is designed to promote improved health care practices and create a foundation upon which local professionals can start to build the networks that lead to

long-term sustainable development. Conversely, the direct medical care provided during the MEDCAP portions of MEDFLAG operations is centered around short-term training benefits that provide incidental health care to select populations and seldom produces lasting effects. In the context of nation building, democratization, economic prosperity, and regional stability, individual MEDCAP teams have minimal impact.

Notes

¹Major Rick Cook, US Air Force, Headquarters United States European Command, Medical Plans and Operations Officer, interviewed by author, 14 January 1997.

²Captain Ken Pell, US Army, *Headquarters USEUCOM MEDFLAG Exercises in Africa*. (HQ USEUCOM, Stuttgart, Germany, 27 August 1996).

³Ibid.

⁴Ibid.

⁵United States Air Forces in Europe News Service. *MEDCEUR Enters New Phase Under USAFE*, 20 March 95, n.p.; on-line, Internet, 30 October 1996, available from http://www.dtic.mil/airforcelink/pa/mar95/an032095 20mar95 235.html

⁶Major Cook interviewed by author.

⁷Major Brian D. Peyton, 48th Medical Group Flying Ambulance Surgical Trauma Team, *MEDCEUR 96-1 Medical After Action Report*, (HQ USEUCOM, Stuttgart, Germany 8 April 1996).

⁸Lt Col Dalton E. Diamond, Director, Medical Services, Alabama National Guard. *After Action Report, Partnership for Peace MEDCEUR 96-2, Romania,* (HQ USEUCOM, Stuttgart, Germany 28 August 1996).

⁹Pell. HO USEUCOM MEDFLAG Exercises in Africa.

¹⁰Ibid.

¹¹Ibid.

¹²Major Steve Yoshimura, Civil Affairs and Psychological Operations Planning Officer, USARPAC, interviewed by author, 22 January 1997.

¹³United States General Accounting Office Far East Office, *Combined Joint Task Force Cobra Gold-94*, *Annex G, Exercise 94-1 (U), Civil Military Operations*, (HQ USPACOM, Camp Smith, Hawaii), G-2-3, G-2-4.

¹⁴HQ 351st Civil Affairs Command. *Initial HCA Site Survey Appendix. After Action Supplement Report to Cobra Gold-95 Initial Planning Conference, Section IV, MEDCAP Summary,* (HQ USPACOM, Camp Smith, Hawaii).

Chapter 3

Humanitarian Civic Action Mission Impact

Humanitarian and civic assistance programs are provided in conjunction with military operations and exercises, and must fulfill unit training requirements that incidentally create humanitarian benefits to the local populace.

—Joint Publication 3-07

By design, HCA operations are not intended to provide long-term health benefits to target populations.¹ Medical benefits to the host nation population are at times only a byproduct of U.S. military force training or exercises. This philosophy may appear callous from the humanitarian perspective but is congruent with Department of Defense policy which states: "HCA activities must promote the following: security interests of the U.S. and host nation, specific operational readiness skills of the members of the U.S. Armed Forces who participate in the activities and U.S. foreign policy interests." Wording in Joint Publication 3-07, Joint Doctrine for Military Operations Other Than War, is straightforward: "This assistance (HCA) is provided in conjunction with military operations and exercises, and must fulfill unit training requirements that incidentally create humanitarian benefit to the local populace." This guidance is the foundation upon which medical HCA missions are currently designed, planned and executed. Training is the first priority (U.S. forces and host nation personnel), U.S. presence and public relations (political and security emphasis) is the second priority and medical care to the host nation

population is a tertiary concern. Considerable debate exists over the short-term benefits provided by HCA operations but current mission emphasis and focus are clearly based on joint doctrine.

In spite of significant structural variances, USEUCOM and USPACOM medical HCA missions are consistent with regard to impact on U.S. forces involved in the operation and host nation personnel. Without exception, HCA missions accomplish training objectives, promote U.S. interests in the host nation, and leave participants feeling good about care they provided to their target populations. Colonel Roland Weisser describes the feeling as "one of the most satisfying warm fuzzy feelings that can be attained legally." There should be no debate the training received in these missions is unequaled. Countless hours in the classroom or simulated deployment exercises are dwarfed by the training received in real-world situations and all after action reports convey this message. In addition, U.S. Embassies in host countries quickly hail each mission as a success and promote HCA missions as an example of American resolve and commitment to developing nations.

Medical HCA mission are not cheap. Typically, a MEDFLAG mission consumes \$65K-\$100K in USC Title 10, Section 401 funds and an additional \$10K-\$25K in USC Title 10, Section 2010 funds for each 8-10 day mission.⁵ This excludes transportation costs for deployment, redeployment, incremental expenses and equipment or supply transfers (if conducted) associated with the exercise.

Understanding the intent of HCA missions is not dedicated to providing medical support to the host nation, it is prudent and reasonable to try and effect the best possible outcome especially in light of the resources consumed by each mission. The best possible outcome would meet all U.S. forces training objectives *and* create lasting health care

improvements to the host nation. Lasting health care improvements are not defined by number of patients treated or villages visited. These improvements can only be measured over time and depend on adequate follow-up protocols, accurate mission documentation (lessons learned), education and the joint doctrine necessary to support long-term benefits.

There is little evidence to suggest MEDCAP operations as part of medical HCA missions produce more than transient short-term benefits. Select patients may receive long-term benefits with dental extractions, eyeglass issues or immunizations but little is done to improve the health care status of the host nation.⁶ In fact, several authors published on this subject suggest when U.S. military forces redeploy, the host nation population being served is left in a worse situation than before U.S. forces arrived and attribute this to fostering false hope and lack of adequate follow-up procedures.⁷

EUCOM Medical HCA Mission Impact

Medical HCA mission objectives in EUCOM are to: provide U.S. military forces with joint training and mass casualty exercise training, promote U.S. military presence in the country, provide direct patient care to portions of the host nation population (MEDCAP), and foster the exchange of medical information and reciprocal contact between the U.S. and host nation health care providers. Without exception, MEDFLAG and MEDCEUR missions meet established training objectives. United States forces train on site selection, mobilization, deployment, employment, sustainment and redeployment operations on every mission. Planning and conducting mass casualty exercises are also integral parts of each mission. After action reports and trip summaries characterize the training and exercises provided by these aspects of the mission as unqualified successes. The exchange

of medical information objective between U.S. and host nation health care professionals is often accomplished but not in every mission. Several missions failed to meet this objective because local health care providers were not available to work with U.S. forces due to health care commitments in their respective communities.¹⁰

Medical HCA missions in Africa (Table 1) and Eastern Europe are directed at different countries each year. European and Africa Working Groups triage countries in their respective geographical area based on relative importance to U.S. security interests and foreign policy objectives. Countries are placed in tiers and missions are planned according to the CINCs agenda in supporting the National Military Strategy (NMS).¹¹ Only four times have EUCOM sponsored medical HCA teams revisited a country (Table 1). This is in direct contrast with HCA missions in USSOUTHCOM and USPACOM where the same countries are targeted each year in an attempt to create lasting improvements and assess previous missions. Based on after action reports, formal evaluations and the statistical analysis below, Cobra Gold missions in Thailand appear to produce a better long-term impact than MEDFLAG missions to African countries. This is not surprising. Cobra Gold missions have been directed at Thailand for the past 13 years and long-term health care improvements to the indigenous populations are evidenced by several measures of effectiveness discussed below. Formal mechanisms for follow-up to previous MEDFLAG/MEDCEUR missions in Africa and Eastern Europe do not exist and make it difficult to assess the impact on health care in the host nation.

Determining the actual impact of specific military HCA missions does not lend itself well to quantitative analysis models. Human perceptions, philosophies and attitudes are all part of the impact each mission has. In addition, numerous other U.S. Governmental

agencies, NGOs, PVOs and IGOs all participate in relief and education efforts in these countries. To complicate assessments, U.S.A.I.D. liaison officers Bureau for Africa, claim host nation leaders are often biased in their assessment of MEDFLAG and other humanitarian missions to their countries.¹² According to U.S.A.I.D. personnel, getting objective analysis of mission successes from host nation officials is difficult based on African culture. African officials are inclined to tell humanitarian assistance groups what they think these groups want to hear and their comments may or may not represent a valid operational assessment.¹³ The following statistical analysis is an attempt to quantitatively trend health care related measures of effectiveness for the four countries that have hosted two MEDFLAG missions (USEUCOM) and for Thailand (USPACOM). statistics are not evaluated for discrete comparative analysis. Instead historical data is presented to simply identify which direction health care in a specific country is trending. For each country, the three parameters of life expectancy (male and female), infant mortality (expressed as deaths per 1000 births) and percentage of the population with access to safe drinking water were evaluated. The World Health Organization tracks these measures of effectiveness for developing nations.

Regular health statistics reporting is not a fundamental part of developing nations and in extreme instances, national health data is repressed to avoid adverse implications on national leadership.¹⁴ Data from 1996 was available for all countries but data from earlier periods for comparison varies.

Table 2. Botswana Health Statistics

| | 1986 ¹⁵ | 1996 ¹⁶ |
|-----------------------------|--------------------------|--------------------------|
| Life expectancy Male: | 56 | 61 |
| Female: | 63 | 67 |
| Infant mortality | 87 per 1,000 live births | 38 per 1,000 live births |
| % with access to safe water | 60% | 88% |

Botswana MEDFLAG missions were conducted in 1989 and 1994. Both missions were extremely successful despite minor logistical problems. Primary benefits to U.S. forces and Botswana military forces centered around training and education. Medical information exchange was good and U.S. forces received joint training experience, enhanced cultural awareness and disaster response training. A total of 1,372 medical and dental patients were treated. 19 Analyzing the above statistics. Botswana has improved in every measure of effectiveness and is globally considered a success story.²⁰ Life expectancy is increased for both males and females, infant mortality rates dropped from 87 to 38 and 28% more of the population has access to safe drinking water. Life expectancy in Botswana at 61 and 67 for males and females respectively is much greater than the African average life expectancy of 52 years and an infant mortality rate of 38 is much less that the 93 average for the rest of Africa. Obviously health care improvements can not be solely attributed to two MEDFLAG missions treating 1372 patients but MEDFLAG efforts in this country were quite successful. Botswana represents a country in which the U.S. invested sizable humanitarian assistance resources, including MEDFLAG missions, and has become self-sustaining.²¹ Unfortunately, as seen in the following data, Botswana is the exception.

Table 3. Cameroon Health Statistics

| | 1982 ²² | 1996 ²³ |
|-----------------------------|---------------------------|---------------------------|
| Life expectancy Male: | 52 | 48 |
| Female: | 55 | 51 |
| Infant mortality | 105 per 1,000 live births | 110 per 1,000 live births |
| % with access to safe water | 40% | 33% |

Cameroon MEDFLAG missions were conducted in 1988 and 1991. The 1988 mission was a typical MEDFLAG mission with education, immunizations, and exercises. ²⁴ The 1991 MEDFLAG was a limited mission focusing exclusively on a meningitis immunization program. ²⁵ Again, training in readiness aspects ranging from mobilization to redeployment were successes and during the 1991 MEDFLAG mission, over 58,000 inoculations were issued to 1,700 patients. Measures of effectiveness dropped in every category. Life expectancy went down, infant mortality rose and percentage of the population with access to safe drinking water went down. Trends are clearly downward for these health care parameters and both life expectancy and infant mortality are worse than the African average of 52 years and 93 deaths/1,000 live births respectively. ²⁶ Medical HCA missions and other assistance received from NGOs, IGOs and PVOs do not appear to have fostered any long-term benefits for Cameroon.

Table 4. Senegal Health Statistics

| | 1986^{27} | 1996 ²⁸ |
|-----------------------------|--------------------------|--------------------------|
| Life expectancy Male: | 47 | 56 |
| Female: | 49 | 59 |
| Infant mortality | 86 per 1,000 live births | 74 per 1,000 live births |
| % with access to safe water | 47% | 26% |

Senegal MEDFLAG missions were conducted in 1990 and 1993. Both operations were typical MEDFLAG missions.^{29 30} The 1993 after-action report was very specific and

contained numerous lessons learned that should be entertained when planning future MEDFLAG missions. Life expectancy in Senegal has gone up and infant mortality is improving but less of the population has access to safe drinking water. Both life expectancy and infant mortality are better than the African average. Senegal MEDFLAG missions were immunization intensive. Over 2700 immunizations were given in 1990 and over 4000 patients were immunized in 1993.³¹ After action reports did not mention education on public health or water and sanitation issues. Medical HCA immunization programs probably contributed to life expectancy and infant mortality improvements but the 7000 immunized patients represent less than 0.1% of the Senegalese population.³²

Table 5. Zimbabwe Health Statistics

| | 1982-1985 ³³ | 1996 ³⁴ |
|-----------------------------|--------------------------|--------------------------|
| Life expectancy Male: | 56 | 40 |
| Female: | 59 | 43 |
| Infant mortality | 53 per 1,000 live births | 73 per 1,000 live births |
| % with access to safe water | 74% | 80% |

Zimbabwe MEDFLAG missions were conducted in 1991 and 1995. The 1991 mission included education classes on preventive medicine and environmental health. Mission data for the 1995 Zimbabwe MEDFLAG was unavailable for analysis. Table 5 displays marked downward trends in life expectancy and infant mortality and an overall improvement in the population's access to potable water. Environmental and public health classes may have improved Zimbabwe's access to safe drinking water but clearly the country has not experienced significant long-term health care improvements in the past 10 years as measured by these health care indicators. In fact, life expectancy in Zimbabwe is projected to fall even further to 35 years by the year 2010. The same and the same access to the sam

With the obvious exception of Botswana, MEDFLAG missions, specifically the MEDCAP component, do not seem to foster long-term health benefits. Mission focus is directed at training U.S. forces and host nation personnel. Two other factors hinder MEDFLAG ability to create long-term health care improvements. First, formal assessment and follow-up mechanisms are not in place to determine if host nation personnel training and education efforts were successful. Second, by design MEDFLAG missions are not redirected at the same countries year after year. Spending 10 days in a country once or even once every 3-5 years is not sufficient to create lasting benefits. Both of these factors are discussed in the following chapter.

Cobra Gold Mission Impact

Cobra Gold mission intent is to: "... train U.S. and Thai engineers, medical and other health personnel, Special Forces, Civil Affairs and PSYOP (psychological operations) forces in individual and team skills which directly enhance mission readiness and capability of individuals, teams and units." As with USEUCOM forces, training U.S. and host nation forces is the primary objective.

Formal assessment mechanisms for Cobra Gold missions are much more structured than in USEUCOM. In addition to detailed after action reports, USCINCPAC has commissioned several retrospective assessments of MEDCAP programs in Thailand.³⁹ These reports, often conducted by a single officer, detail numerous findings associated with the 13 year history of Cobra Gold missions in Thailand. Summarizing the benefit of these missions, the most recent assessment officer, Maj Povl G. Wise, Assessment Civil Affairs Action Officer concluded that after 13 years, rural MEDCAP missions had reached

the saturation point. In his opinion, Thailand is emerging as a better-developed nation and should move from a mitigating civic action (MCA) emphasis to a developmental civic action (DCA) emphasis. Mitigating civic action and DCA are discussed further in the next Chapter. Long-term commitments in and of themselves do not guarantee success as evidenced MEDRETE missions to Honduras which after 11 years have shown no measurable benefits.⁴⁰

United States Pacific Command forces concentrate more on providing medical and civil engineering assistance in conjunction with training efforts while USEUCOM forces emphasize the training objectives more than providing medical and infrastructure assistance. Nowhere is this difference more evident than in mission planning. Cobra Gold operations include both a MEDCAP component and an ENCAP component. Structuring these capabilities to operate concurrently, provides a synergistic effect. Medical units are available to consult on environmental and health related issues and engineering units are available to meet basic infrastructure requirements. Both types of missions (MEDFLAG and Cobra Gold) operate within Title 10, United States Code, guidelines but stress different aspects of their HCA programs. Table 6 graphically displays the results of this difference in emphasis. United States and Thai forces seem to have succeeded in generating sustainable improvements in the three measures of effectiveness used for trend analysis.

Table 6. Thailand Health Statistics

| | 1985 ⁴¹ | 1996 ⁴² |
|-----------------------------|--------------------------|--------------------------|
| Life expectancy Male: | 60 | 66 |
| Female: | 65 | 70 |
| Infant mortality | 45 per 1,000 live births | 27 per 1,000 live births |
| % with access to safe water | 66% | 81% |

Life expectancy, infant mortality and percentage of the population with access to safe drinking water have all improved in Thailand during the past 11 years. Organizations such as U.S.A.I.D. and other agencies have also poured resources into Thailand but their efforts have been directed at the macro level of economic development and trade.⁴³

Cobra Gold missions personify a long-term commitment to improve the basic health care situation and infrastructure in Thailand and appear to have affected significant long-term health care benefits to the host nation. Summarizing the necessity of long-term commitment Colonel Charles Hood, succinctly states: "Without the willingness to commit for years, medical humanitarian operations will be a disappointment.⁴⁴

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⁴⁰Weisser, Page 573.

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⁴³United States General Accounting Office Far East Office. Page 38.

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Chapter 4

Alternatives and Conclusions

Although they may provide an excellent training experience, many factors make it difficult for Medical Civic Action Project missions to have any meaningful impact on the health of the local population.

—CDR James M. Crutcher

The stimulus for this research was a Joint Staff sponsored proposal to investigate alternatives to current MEDCAP mission structure that may produce a better long-term benefit for host nation populations.¹ Assumptions in this proposal identified MEDCAP operations as a political tool that seldom had lasting benefits and called for a more tailored approach to create a sustained health care benefit to target populations. Based on the research and facts presented in this paper, the remainder of the paper briefly outlines why most medical HCA missions do not produce long lasting medical improvements and identifies alternatives to integrate long-term health benefits into the operational end state of these missions.

Several factors inherent in joint doctrine, mission emphasis and structure render it almost impossible for HCA operations, as currently designed, to produce long-term health care benefits. Limiting factors include: short "time on target", lack of follow-up, support services, medicines, language barriers, cultural ignorance, endemic diseases, and lack of infrastructure. ² Individual missions are short duration (8-10 days), lack structured follow-

up, and provide medical care in austere conditions to countries that lack the basic infrastructure and capabilities to sustain health care improvements. The dynamic variables of culture and beliefs also play into the type of care provided to host nation populations. Creating long-term sustained medical benefits to underdeveloped countries is challenging.

If the objective of medical HCA missions is to train U.S. forces that create incidental health benefits to the host nation, MEDFLAG, MEDCEUR and Cobra Gold missions are successful as currently designed and executed. If the objective of medical HCA missions is to train U.S. forces and create long-term health care improvements for the host nation, several alternatives to current doctrine and practice warrant consideration.

United States military forces are trained to get in, get the job done and get out of contingency situations. Emphasis is on mitigating contingency situations, stabilizing the area and moving on to other demands. Medical humanitarian civic action projects require a focused, long-term commitment tailored for each country to effect the best possible improvement in health care capabilities. Before senior military and civilian officials can expect medical HCA operations to improve health care capabilities in a host nation, several alternatives must be addressed. Joint doctrine emphasis, country wide strategic plans, interagency coordination, follow-up protocols and education/training are all alternatives to existing practices which may help effect lasting health care improvements.

Joint Doctrine

Existing joint doctrine and multiservice guidance is confusing. With the exception of Joint Pub 0-2, Unified Action Armed Forces (policy), joint publications are intended as authoritative guidance to be followed except when, in the judgment of the commander, exceptional circumstances dictate otherwise.³ Joint Publication 3-07, Joint Doctrine for

Military Operations Other than War is very specific with regard to HCA operations.⁴ This document, as previously referenced, limits HCA missions to the role of providing training for U.S. forces. A somewhat broader position is found in Joint Publication 4-02, Doctrine for Health Services Support in Joint Operations, which promotes HCA missions as a joint effort with civilian agencies to furnish medical and civic assistance that the local government is not capable of providing.⁵ Broader still is the definition found in ACCP 50-56, FM 100-23-1 and NDC TACNOTE 3-07.6 which declares HCA operations as a "long-term proactive program coordinated by regional unified commands...which include medical, dental, and veterinary care and some local infrastructure construction and repair."

Are HCA operations a planned long-term effort or are they a focused exercise conducted to provide training for U.S. forces? Title 10, United States Code bluntly mandates HCA missions only be performed when they promote U.S. and host nation security interests and the operational readiness skills of the members of the armed forces but this is still broad enough to encompass many future scenarios. Medical HCA missions focus on the training aspects of each operation to the exclusion of a structure that could support long-term development and concurrently meet training objectives. Future iterations of joint doctrine could emphasize the importance of attacking the underlying health care problems of developing nations while meeting training objectives and incorporate some of the alternatives listed below to create lasting improvements in host nation medical capabilities.

Strategic Plan

The Secretary of State approves all HCA missions but the geographic CINC must decide when and where these operations are conducted. If HCA missions do not support or contribute to the CINC's strategic vision for his respective area of operations (AOR), they are superfluous. Host nations must be selected based on a prioritized assessment of candidate nations in the AOR. Once selected, a country "strategic plan" for improving and sustaining health care capabilities is necessary. Currently EUCOM planners use a standard mission selection system to identify which countries receive HCA missions. If medical HCA operations in USPACOM start expanding to other countries besides Thailand, the CINC's strategic interests must be the primary consideration in country selection.

What is lacking in both theaters is a strategic plan. Long-term, lasting benefits are facilitated with a strategic plan for attacking the underlying causes of health care and infrastructure problems. In addition, the PACAF model used in Cobra Gold missions of incorporating MEDCAP and ENCAP projects into a consolidated exercise may produce a better result than the MEDCAP specific operations in EUCOM. For over 13 years, HCA missions in both theaters have focused on mitigating health care problems and not on sustained health care development. United States Pacific Command is starting to transition efforts in Thailand from a mitigating effort to a developmental effort. This approach requires protracted, phased planning and must include non-governmental organizations (NGOs), U.S. governmental agencies such as U.S.A.I.D., and other relief organizations. Mitigating efforts will always be necessary to satisfy the immediate, life threatening health care conditions and infrastructure in a host nation and for disaster relief

responses. For planned HCA missions, efforts should be shifted to developmental strategies as soon as possible to effect long-term health care improvements.

Interagency Coordination

The Department of Defense (DOD) does not have the resources or manpower for the long-term commitment necessary to create sustained health care improvements in underdeveloped countries. The strategic plan for target nations must be a collaborative effort involving U.S. military personnel, the host nation country team and civilian relief organizations. Interagency coordination is necessary for several reasons. First it reduces duplicative efforts. In Cameroon, U.S.A.I.D. personnel and DOD personnel targeted the same village for immunization. United States military forces arrived in the village only to find that U.S.A.I.D. has been there two weeks prior. Second, interagency coordination creates a synergy which should provide quicker, better results for the host nation population. Civilian agencies that lack the infrastructure necessary to conduct large-scale immunization programs may serve in a follow-up or assessment role to primary inoculation efforts. These follow-up teams may be comprised of only a few individuals vice the large number of personnel required for mass immunization. Third, civilian agencies and U.S. military forces each have unique capabilities they bring to an operation. Military forces are adept at large scale logistics, security capabilities and patient treatment in austere conditions. No one does airlift and the associated tasks of marshaling, loading and transporting equipment and supplies better than U.S. military forces. Civilian agencies often occupy a physical presence in a host nation and provide invaluable intelligence data for planning and execution. In addition, these agencies usually understand the customs, culture and idiosyncrasies of the host nation population and often have excellent data on possible threats (biological and physical). Fourth, no one has the independent resources to create changes to the basic health care needs of many underdeveloped nations. The economy of scale and combination of resources may make interagency coordination an essential element of a country's strategic plan. Interagency coordination should span the entire scope of mission operations from initial strategic planning through the definition and execution of the desired end state. Trained military officers and civilian agency leadership must understand how the other works. Perhaps an education with industry type of rotation should be used to place military officers into civilian organizations to gain this understanding.

Two additional factors require attention when discussing DOD and civilian interagency coordination. First, U.S. military forces work for the CINC and not the State Department or civilian relief agencies. Commanders of medical HCA missions must be coequal and not subordinate to civilian agencies. Operation Support Hope, Rwandan humanitarian assistance operation highlighted the importance of military leadership being on equal footing with civilian counterparts. Chain of command is clear. The CINC's interests must remain paramount in interagency coordination and strong, empowered, trained leadership is essential when dealing with civilian agencies. Small scale Civil Military Operation Centers (CMOC) additions to current exercises would provide excellent training opportunities for future joint operations with civilian agencies and provide the platform to exercise interagency coordination. Second, it is very important to instill a sense of pride and self-sustainment in local host nation populations. United States military forces should de-emphasize their role in helping nations secure basic health care capabilities and host nation personnel must be involved in all planning phases from

be mission objectives." Unfortunately, many civilian agencies do not share this philosophy. If long-term development is going to occur, host nation medical professionals and government leaders must be included in all relief efforts and credited with effecting positive changes in the level of health care available to their constituents. This is in direct contrast to many NGOs who are eager to credit themselves for successes in an attempt to secure future funding. Senior military leadership must walk this tightrope carefully and avoid becoming a pawn used by civilian agencies.

Lastly with regard to interagency coordination, joint forces need to train like they fight. This includes their role in medical HCA missions and work with civilian agencies. The Joint Readiness Training Center, Fort Polk, Louisiana is currently running joint training programs for humanitarian operations. This program involves U.S. military forces and civilian agency personnel and focuses on joint medical readiness training. Civil Military Operations Centers are established as U.S. military forces and civilian agencies respond to manufactured scenarios. Training programs like this and those sponsored by USACOM will prepare military and forces and civilian agencies to work together in an attempt to foster long-term health care improvements in target countries.

Follow-Up Protocols

Neither the USEUCOM nor the USPACOM medical HCA programs have good follow-up protocols to determine the success, failure or impact of individual and cumulative HCA missions. Cobra Gold exercises have been studied retrospectively to determine cumulative benefit to the Thai population and have documented excellent observations. Follow-up protocols should be an interagency effort and must be defined

during the planning stages of each operation. Lt Col William Ward astutely observes "Host nation commitment is essential. There is little long-term benefit of a medical team inoculating a village if there is insufficient institutional capability to perform follow-up visits." Civilian organizations that lack the resources to conduct primary treatment or education operations may be perfect for a limited follow-up role. Small teams of only a few individuals could assess the impact and effectiveness of HCA missions. This feedback is crucial when trying to measure the effectiveness of specific operations. Protocols should identify measurable objectives associated with each mission. Short-term objectives such as percentage of the population with access to safe drinking water or percentage of the population immunized and long-term objectives like infant mortality should be included. This collaborative effort will probably be better performed by civilian agencies with a physical presence or administrative ties to the target nations than by U.S. military forces.

Education and Training

After action reports and case studies clearly show host nation professionals trained by medical HCA teams are more effective at spreading knowledge and inducing behavioral change than any outsider. A good education and training strategy will focus on prevention and will involve the health officials, professionals and host nation governmental representatives. Four factors are important to remember when designing education and training programs. First, U.S. forces receive valuable training before even mobilizing for deployment, when they prepare the lesson plans for host nation training. Second, the World Health Organization (WHO) cautions against implementing a standard of medical care that exceeds the locally established standard. Third, when preparing education and

training programs, U.S. military forces must be objective in sharing medical information. Ethnocentrism must be carefully avoided and information transfer should be confined to accepted medical practices, not Western ideals, values or standards of care. Fourth, U.S. military forces can gain valuable education and training from host nation professionals through the medical information exchange phase of most HCA missions.

Medical HCA missions Cobra Gold, MEDFLAG and MEDCEUR started as nothing more than training missions for U.S. military forces and in this role are unqualified successes. Mission creep has occurred over the past 9 years and now a mission change is necessary if U.S. officials want these operations to create long-term health benefits (something they were never designed to do). Medical HCA missions are already an integral part of U.S. national security strategy and routinely promote foreign policy objectives. The positive effects of these operations could only be magnified if HCA missions also fostered lasting medical benefits to host nations.

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